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EXAMINER
DAVENPORT, MON CHERI S

ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/605,442	NAISMITH ET AL.	
	Examiner	Art Unit	
	MON CHERI S. DAVENPORT	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 15-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-13 and 15-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims** ~~1-16~~ 1-13, 15-17 rejected under 35 U.S.C. 102(b) as being anticipated by Hauet (US Patent Number 6,799,077).

3. With respect to **Claims 1 and 12**, it is noted that the language used by Applicant merely suggest or makes optional those features described as "adapted to"; It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

Regarding **Claim 1** Hauet discloses a programmable logic controller comprising ***(see figure 3):***

a backplane having an internal communication bus for connecting one or more of the programmable logic controller with each other ***(see figure 3, section 17', automatic controllers) (section 19, local area networks, see col. 5, lines 33-42, the operating units are connected internal and physically by links L which reads on backplane)***;

one or more modules connected to said backplane ***(see figure 3, section 18, 18', 18'', I/O units);*** said

modules capable of communicating over said backplane using the IP protocol*(see col. 5, lines 62-66, the units are capable of transmitting and receiving IP datagrams);*

wherein each module has its own IP address assigned using a local addressing schema *(see col. 5, lines 58-66, the units are individually provided with HTTP servers, and have Internet-type addresses, which reads on local addressing schema).*

Regarding **Claim 2** Hauet discloses everything as applied above (*see claim 1*). In addition the programmable logic controller includes:

wherein the IP address uses a local addressing schema uses a Private IP address *(see col.5, lines 58-66, the Internet-type address, comply with HTTP/TCP/IP protocols of the industrial local area networks, which is capable of using private IP addresses).*

Regarding **Claim 3** Hauet discloses everything as applied above (*see claim 2*). In addition the programmable logic controller includes:

wherein the local addressing schema is in a form of 192.168.XX.YY*(see col.5, lines 58-66, the Internet-type address, comply with HTTP/TCP/IP protocols of the industrial local area networks).*

Regarding **Claim 4** Hauet discloses everything as applied above (*see claim 1*). In addition the programmable logic controller includes:

wherein a term in the addressing schema represents the number of the programmable logic controller (*customer/server request)(see col. 6, lines 31-36, the LAN of a cluster of units*

conveys IP diagrams corresponding to the customer/server request coming from or via the shared unit, see col.5, lines 58-66).

Regarding **Claim 5** Hauet discloses everything as applied above (*see claim 1)*. In addition the programmable logic controller includes:

wherein a term in the local addressing schema represents a number describing a position in said backplane ***(see col. 6, lines 20-30, the customer unit has an HTTP/TCP/IP protocol stack available to address its request and take into count information received from server).***

Regarding **Claim 6** Hauet discloses everything as applied above (*see claim 1*). In addition the programmable logic controller includes:

wherein the IP protocol is used in conjunction with a TCP protocol ***(see col. 5, lines 58-62, units are individually provided HTTP/TCP/IP protocols address).***

Regarding **Claim** 7 Hauet discloses a method of communication between a first module and a second module on a programmable logic controller backplane comprising ***(see col. 5, lines 9-18):***

connecting said first module to said programmable logic controller backplane wherein the first module is connected to a network of IO modules ***(see col. 5, lines 9-18, programmed operating units suited at the interface, with I/O units , see figure 3,see also col. 5, lines 33-42, the operating units are connected internal and physically by links L which reads on backplane);***

connecting said second module to said programmable logic controller backplane wherein the second module is connected to an Ethernet network ***(see figure 3, section 9, server) (see figure 3, see col. 5, lines 9-18);***

communicating, over an internal communication bus on said between said first module and said second module ***(see col. 2, lines 22-37, see also col. 5, lines 33-42, the operating units are connected internal and physically by links L which reads on backplane)*** using the IP protocol, where the first module and the second module have their own IP address for backplane communications, said IP address assigned using a local addressing schema ***(see col. 5, lines 58-66, the units are individually provided with HTTP servers, and have Internet-type addresses which reads on local addressing schema).***

Regarding **Claim 8** Hauet discloses everything as applied above (*see claim 7*). In addition the method of communication includes:

wherein the Ethernet network is connected to an Internet ***(see col. 4, lines 25-31).***

Regarding **Claim 9** Hauet discloses everything as applied above (*see claim 7*). In addition the method of communication includes:

wherein an addressing schema for the IP address uses a term representing the position of the module on the backplane***(see col.5, lines 58-66, the Internet-type address, comply with HTTP/TCP/IP protocols of the industrial local area networks, which determines how to address a module in a position on the backplane).***

Regarding **Claim 10** Hauet discloses everything as applied above (*see claim 7*). In addition the method of communication includes:

wherein the network of IO modules***(see col. 5, lines 9-18, programmed operating units suited at the interface, with I/O units , see figure 3)*** is an Ethernet network***(see figure 3, section 9, server) (see figure 3, see col. 5, lines 9-18)***.

Regarding **Claim 11** Hauet discloses everything as applied above (*see claim 7*). In addition the method of communication includes:

wherein the IP protocol is used in conjunction with a TCP protocol ***(see col. 5, lines 58-62, units are individually provided HTTP/TCP/IP protocols address).***

Regarding **Claim 12** Hauet discloses an industrial automation system comprising:

at least one programmable logic controller having a backplane, said backplane having an internal communications bus that is adapted for communicating messages over said backplane, wherein the messages are formatted using an IP protocol ***(see col. 4, lines 1-45, see figure 2);***

a first network module **(section 18, site unit)** connected to said backplane **(section 19, LAN)** that is also connected to an I/O network ***(section 9, server) (see figure 3, see also col. 5, lines 33-42, the operating units are connected internal and physically by links L which reads on backplane)*** ; and

a second network module **(section 18', site unit)** connected to said backplane **(section 19, LAN)** that is also connected to an Ethernet network **(section 9, server)** wherein the first network module **(section 18, site unit),** and the second network module **(section 18', site unit)**

each have their own IP address for backplane communications, said IP address assigned using a local addressing schema*(see col. 5, lines 58-66, the units are individually provided with HTTP servers, and have Internet-type addresses, which reads on local addressing schema))*.

Regarding **Claim 13** Hauet discloses everything as applied above (*see claim 12*). In addition the industrial automation system includes:

wherein said Ethernet network is connected to the Internet*(see col. 4, lines 25-31)*.

Regarding **Claim 15** Hauet discloses everything as applied above (*see claim 13*). In addition the industrial automation system includes:

wherein the I/O network *(see col. 5, lines 9-18, programmed operating units suited at the interface, with I/O units , see figure 3)* is an Ethernet network*(see figure 3, section 9, server) (see figure 3, see col. 5, lines 9-18)*.

Regarding **Claim 16** Hauet discloses everything as applied above (*see claim 12*). In addition the industrial automation system includes:

wherein the IP protocol is used in conjunction with a TCP protocol *(see col. 5, lines 58-62, units are individually provided HTTP/TCP/IP protocols address)*.

Regarding **Claim 17** Hauet discloses everything as applied above (*see claim 15*). In addition the industrial automation system includes:

wherein the system is adapted to monitor the operation of a device on the I/O network connected to said first network module, by a user at a remote location on the Internet connected

to said second network module, via messages formatted using the IP protocol and communicated between said first and second network modules over said backplane ***(see col. 5. lines 32-38, operating units are connected to one another and to the various device for monitoring /controlling the system, which certain units are physically connected by links L).***

Response to Arguments

Objection to the specification is withdrawn in view of Applicant's amendment filed December 4, 2007.

4. Applicant's arguments filed December 4, 2007 have been fully considered but they are not persuasive.

In the remarks on pg. 9 of the amendment, the applicant contends that Hauet does not teach or suggest "a backplane having an internal communication bus for connecting one or more modules of the programmable logic control with each other"

Examiner respectfully disagrees Hauet teaches the operating units (PLC) are connected internal and physically by links L which reads on backplane as shown in figure 3.

In the remarks on pg. 9 and 10 of the amendment, the applicant contends that Hauet does not teach or suggest "local addressing schema for assigning IP address for each module"

Examiner respectfully disagrees Hauet teaches the units (modules) are individually provided with HTTP servers, and have Internet-type addresses, which reads on local addressing schema.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MON CHERI S. DAVENPORT whose telephone number is (571)270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD/md
February 29, 2008

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